

What is claimed is:

1. A compartment door structured to be used with a handheld electronic device of a type having a primary housing portion with a cavity formed therein, the cavity being in communication with an exterior of the primary housing portion, the compartment door comprising:

a panel having an inner surface and an outer surface;

a camera mounted to the panel and disposed substantially opposite the outer surface;

a number of attachment structures disposed on the panel and structured to cooperate with the handheld electronic device to removably mount the compartment door to the handheld electronic device to substantially enclose the cavity, the compartment door being structured to cooperate with the primary housing portion to together form a housing of the handheld electronic device, with the inner surface of the panel facing toward the cavity, with the camera being disposed substantially within the cavity, and with the outer surface facing away from the cavity when the compartment door is mounted to the handheld electronic device.

2. The compartment door of Claim 1 wherein the panel is structured such that the outer surface thereof is disposed substantially flush with an exterior surface of the primary housing portion adjacent the cavity when the compartment door is mounted to the handheld electronic device.

3. The compartment door of Claim 1 wherein the panel includes a first end and a second end, and wherein the attachment structures include a movable latch and at least a first substantially stationary tang, the movable latch being disposed generally at the first end, and the at least a first substantially stationary tang being disposed generally at the second end.

4. The compartment door of Claim 1 wherein the compartment door is a battery compartment door and is structured to additionally enclose a battery of the handheld electronic device within the cavity.

5. The compartment door of Claim 1 wherein the camera includes a body, a lens, and a flash apparatus, the lens being disposed on the body, and the flash apparatus having at least a first light source disposed adjacent the lens.

6. The compartment door of Claim 5 wherein the flash apparatus includes a pair of LEDs, with the lens being disposed generally between the LEDs.

7. The compartment door of Claim 1 wherein the panel includes a support disposed on the inner surface, the support including a printed circuit board, with the camera being disposed on the printed circuit board, and with the printed circuit board including a

number of first electrical contacts structured to be electrically engaged with corresponding second electrical contacts on the handheld electrical device for powering the camera and for transferring data from the camera to the handheld electronic device.

8. The compartment door of Claim 7, wherein the support further includes a bracket disposed on the inner surface of the panel, with the printed circuit board being disposed on the bracket.

9. The compartment door of Claim 7, wherein the panel includes an end, and wherein the support is disposed substantially at the end of the panel.

10. A handheld electronic device comprising:

a housing;

a battery disposed on the housing;

the housing having a compartment door and a primary housing portion having an exterior and a cavity formed therein, the cavity being in communication with the exterior of the primary housing portion;

the compartment door having a panel and a camera;

the panel having an inner surface and an outer surface;

the camera being mounted to the panel and disposed substantially opposite the outer surface; and

the compartment door being removably mounted to the primary housing portion and substantially enclosing the cavity, the inner surface of the panel facing toward the cavity, the camera being disposed substantially within the cavity, and the outer surface facing away from the cavity.

11. The handheld electronic device of Claim 10 wherein the exterior of the primary housing portion includes an exterior surface, the outer surface of the panel being disposed substantially flush with the exterior surface of the primary housing portion adjacent the cavity.

12. The handheld electronic device of Claim 11 wherein an overall form factor of the primary housing portion ignoring the cavity is substantially unaltered by the compartment door being mounted to the primary housing portion.

13. The handheld electronic device of Claim 10 wherein the battery is disposed in the cavity, and wherein the compartment door is a battery compartment door that encloses the battery within the cavity.

14. The handheld electronic device of Claim 10 wherein the camera includes a body, a lens, and a flash apparatus, with the lens being disposed on the body, the flash apparatus having at least a first light source disposed adjacent the lens.

15. The handheld electronic device of Claim 14 wherein the flash apparatus includes a pair of LEDs, with the lens being disposed generally between the LEDs.

16. The handheld electronic device of Claim 10 wherein the panel includes a support disposed on the inner surface, the support including a printed circuit board, with the camera being disposed on the printed circuit board, and with the printed circuit board including a number of first electrical contacts, the primary housing portion including a number of corresponding second electrical contacts, the first electrical contacts and the second electrical contacts being electrically connected together for transferring power to the camera and for transferring data from the camera.

17. The handheld electronic device of Claim 16, wherein the support further includes a bracket disposed on the inner surface of the panel, with the printed circuit board being disposed on the bracket.

18. The handheld electronic device of Claim 16, wherein the panel includes an end, and wherein the support is disposed substantially at the end of the panel.

19. The handheld electronic device of Claim 18, wherein the battery includes an end, and wherein the support is disposed within the cavity substantially between the primary housing portion and the end of the battery.

20. The handheld electronic device of Claim 10, wherein the panel includes a first end and a second end, and wherein the compartment door includes a number of attachment structures that are disposed on the panel and are cooperable with the primary housing portion to removably mount the compartment door to the primary housing portion, the attachment structures including a movable latch disposed generally at the first end of the panel and at least a first substantially stationary tang disposed generally at the second end of the panel.